CLAIMS:

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- 1. A video encoding method for the compression of an original video sequence divided into successive groups of frames (GOFs), said method comprising the steps of:
- (1) generating from the original video sequence, by means of a wavelet decomposition, a low resolution sequence including successive low resolution GOFs;
- 5 (2) performing on said low resolution sequence a low resolution decomposition, by means of a motion compensated spatio-temporal analysis of each low resolution GOF;
 - (3) generating from said low resolution decomposition a full resolution sequence, by means of an anchoring of the high frequency spatial subbands resulting from the wavelet decomposition to said low resolution decomposition;
- 10 (4) coding said full resolution sequence and the motion vectors generated during the motion compensated spatio-temporal analysis, for generating an output coded bitstream.
 - 2. A method according to claim 1, in which, for each frame, said high spatial subbands are directly anchored to the low resolution subband that, in said spatio-temporal decomposition, looks most like said frame, depending on the motion estimation direction.
 - 3. A method according to claim 1, in which a predictive mode is used to construct the high spatial subbands, said high spatial subbands resulting from a second wavelet decomposition performed on a prediction error obtained from a motion compensation applied to the original video sequence.
 - 4. An encoding device for the implementation of the video encoding method according to anyone of claims 1 to 3.
- 25 5. A method for decoding an input bitstream coded by means of an encoding method according to anyone of claims 1 to 3, said decoding method comprising the steps of:
 - (1) decoding said input coded bitstream for generating a decoded full resolution sequence and associated decoded motion vectors;

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- (2) in said decoded full resolution sequence, separating the decoded high frequency spatial subbands and the decoded low resolution decomposition;
- (3) generating from said decoded low resolution decomposition, by means of motion compensated spatio-temporal synthesis, a decoded low resolution sequence;
- 5 (4) reconstructing from said decoded low resolution sequence and the decoded high frequency spatial subbands an output full resolution sequence corresponding to the original video sequence.
- 6. A decoding device for the implementation of the video decoding method according to claim 5.